GOVERNMENT ARTS AND SCIENCE COLLEGE FOR WOMEN, BARGUR

DEPARTMENT OF COMPUTER SCIENCE

I CYCLIC TEST – AUGUST 2019

CLASS   : II B.Sc(SHIFT I)   MAX. HOURS: 2

SUBJECT: Object Oriented Programming With C++   MAX. MARKS: 50

SECTION – A (5 X 2 =10)

I. ANSWER ALL QUESTIONS

1. Define Token.

2. What is Enumerated data type?

3. Differentiate Call by Value and Call by reference.

4. Define Operator overloading

5. Illustrate the use of setw and endl?

SECTION – B (4 X 5 = 20)

II.ANSWER ANY FOUR QUESTIONS

6. Discuss about the keywords, identifiers and constants.

7. Explain the operators in C++.

8. Explain the Inline function

9. Explain the function prototyping

10. Write a C++ program implementing the concept of call by reference.

SECTION – C (2 X 10 = 20)

III. ANSWER ANY TWO QUESTIONS.

11. Explain briefly about the control structure with a neat sketch.

12. i) Explain in detail the basic concepts of OOP.

    ii) Write a C++ program implementing the use of class.

13. Write a C++ program for implementing Function Overloading

SUBJECT INCHARGE   HEAD OF THE DEPARTMENT

[M. DEEPANAYAKI]

Sub: Discrete Mathematics   Marks:50

Class:I-BSc (cs)   Time:1 1/2hrs

Section-A

Choose the correct answer   10x1=10

1. The Boolean Algebra is denoted by

   a) $(B,+,0)$ b) $(A,+,0)$ C) $(G,+,0)$

2. For associative property

   a) $a+b=b+ab$) $(a+b)+c=a+(b+c)$ c) $ab=ba$

3. For any $a \in B$, $a+a=$?

   a) $2a$ b) a c) 0

4. For each $a \in B$, $(a')'=$

   a) a b) 0 c) a'

5. For $a,b \in B$, $(a+b)'=$

   a) $a'+b'$ b) $a'.b'$ c) $a'b'$

6. The Boolean function of $x^5+x^2.x^3+x^3$

   a) $x+x$ b) $2x$ c) x

7. The canonical form containing all of 2^n terms is called

a)Complete canonical form   b) Complete normal

   c) Disjunctive form

8. If $b=c \Leftrightarrow a+b =a+c$, and

   a) $a.b=a.c$ b) $a-b=a-c$ c) $ab=ac$

9. In $a \leq b \Leftrightarrow$, then

   a) $a.b'=0$ b) $a'b'=0$ c) $a'b=0$

10.A Boolean function is

   a) $(+, \cdot , \bullet)$ b) $(+,\cdot ,')$ c) $(+,-,\cdot)$

CLASS : III B.SC (CS)|SHIFT II| DURATION : 3 HRS
SUBJECT: PROBLEM SOLVING TECHNIQUES   MAX.MARKS: 75

ANSWER ALL QUESTIONS   **PART A**   (10* 2=20 MARKS)

1. State the need of Problem solving techniques.
2. How will you evaluate the efficiency of good algorithm?
3. List the application of Fibonacci sequence
4. Give the algorithms of factorial computation.
5. What are prime numbers?
6. How will you raise a number to a large power?
7. Write a note on array techniques?
8. Mention the problem in finding the kth element
9. What is Binary Search?
10. List the ways for Sorting.

ANSWER ALL QUESTIONS   **PART B**   (5* 5=25 MARKS)

11. a) How does algorithm help in designing good coding for a problem?(Or)
     b) Write an algorithm for exchanging values of two variables.
12. a) Write an algorithm for converting decimal integer to octal representation. (Or)
     b) Write the procedure for generation of pseudo random numbers.
13. a) How to find the square root of a given number N. (Or)
     b) Explain partitioning an array with suitable example.
14. a) How to remove duplicated from an ordered array Explain. (Or)
     b) Give the procedure for finding the maximum number in a set. (Or)
15. a) Give the procedure for Binary Search. (Or)
     b) Write an algorithm for Selection sort.

ANSWER ANY THREE QUESTIONS   **PART C**   (3* 10=30 MARKS)

16. What are the problem solving strategies? Explain.
17. Write down the procedure to sine function with suitable example.
18. Write a procedure for finding the GCD of two integers.
19. Discuss in detail to find out the Kth smallest element in an array.
20. Explain the procedure for merging two sorted arrays of integers.

SUBJECT INCHARGE   HEAD OF THE DEPARTMENT

[M. DEEPANAYAKI]

19PCS04

(For the candidates admitted from 2019–2020 onwards)

M.Sc. DEGREE EXAMINATION, MARCH/APRIL 2021

First Semester

Computer Science

PRINCIPLES OF PROGRAMMING LANGUAGES

Time : Three hours   Maximum : 75 marks

PART A — (15 × 1 = 15 marks)

Answer ALL questions.

1. Which of the Following are attributes of Good language?

   (a) Orthogonality   (b) Clarity

   (c) Cost of Use   (d) All of the Above ✓

2. Which of the following will aid for a program to test and debugging?

   (a) Breakpoints   (b) Assertions

   (c) (a) and (b) ✓   (d) None

3. Odd one out?

   (a) C
   (b) C++
   (c) FORTRAN
   (d) ✓ LISP

4. Any Computable function can be computed by a

   (a) ✓ Turing Machine
   (b) CFG
   (c) Context Machine
   (d) Chomsky Grammar

5. What is the data value of number 17?

   (a) ✓ 10001
   (b) 10010
   (c) 11100
   (d) 11110

6. Purpose of declaration is ————.

   (a) Storage representation
   (b) Storage Management
   (c) Poly
   (d) ✓ (a) and (b)

7. Which of the following are the storage representations for linear data structures?

   (a) Sequential
   (b) Linked
   (c) ✓ (a) and (b)
   (d) Iterative

2   S.No. 5019

8. Solutions for Type Equivalences are

   (a) Name
   (b) Structural
   (c) Internal
   (d) ✓ A & B

9. Which of the following concept is often expressed by the phrase, 'One interface, multiple methods'?

   (a) Abstraction
   (b) ✓ Polymorphism
   (c) Inheritance
   (d) Encapsulation

10. What are the three functions required by LISP?

    (a) Name of the function
    (b) Parameters
    (c) Body
    (d) ✓ All of these

11. In how many ways we can capture the external variables in the lambda expression?

    (a) 1
    (b) 2
    (c) ✓ 3
    (d) 4

12. In Haskell, $ sign operator is used to avoid parenthesis, anything that appears after it will take precedence over anything that comes before.

    (a) ✓ $
    (b) .
    (c) &&
    (d) **

3   S.No. 5019

13. A Horn Clauses is
    (a) A clause in which no variables occur in the expression
    (b) A clause that has at least one negative literal
    (c) A disjunction of a number of literals
    (d) A clause that has at most one positive literal

14. Odd one out Semaphores operations
    (a) InitSem   (b) Signal
    (c) Delay   (d) Atomically

15. MIMD Stands for
    (a) Multiple-instruction Multiple-data
    (b) Multiple-initialization Multiple-data
    (c) Multiple instruction memory data
    (d) Multiple information memory data

        PART B — (2 × 5 = 10 marks)
        Answer any TWO questions.

16. What are the Basic Computational Models that describe for most Programming?

17. Explain Implementation and draw the three-storage representation of integers?

18. Illustrate the Array Slices with neat Diagram?

4   S.No. 5019
                                [P.T.O]

19. What will be output of lazy evaluation?
        t = range(20)
        print(t)
        range(), 10)
        print(t[2])

20. What is the difference in between STMD and SIMD? List the difficulties with semaphores?

        PART C — (5 × 10 = 50 marks)

        Answer All questions

21. (a) Briefly explain the Organization of conventional computer.
                Or
    (b) Narrate Pushdown Automata.

22. (a) Discuss about properties of Types and objects.
                Or
    (b) Implement the storage representation of strings.

23. (a) Explain the Following
        (i) Abstraction Concepts
        (ii) Types of messages in Smalltalk.
                Or
    (b) Implement the subprogram definition and innovation.

        5   S.No. 5019

24. (a) Explain Lambda Calculus.

Or

(b) Define Lazy evaluation. List out various advantages and drawbacks.

25. (a) Write a JAVA code for Bounded Buffer Problem.

Or

(b) Write a Bounded buffer problem and solution code using Semaphores.

6   S.No. 5019

GOVERNMENT ARTS AND SCIENCE COLLEGE FOR WOMEN, B'ARGUR
DEPARTMENT OF COMPUTER SCIENCE
I CYCLIC TEST - OCTOBER 2020
II B.SC (E&C)

Subject : C Programming

Semester: III

Time: 2 Hours

Maximum: 50

10 X 1 = 10

PART-A (Answer all questions)

1. In a passage of text a single unit is said to be
    A.Token   B. Loop   C. Operator   D. Priority
2. Constant is said to be a value cannot change during
    A.Error   B.Compile   C. Run time   D. None of the above
3. Do-While is a
    A. Exit controlled   B. Entry controlled   C. Both a & b   D. None of the above
4. A Function is used for printing a particular character
    A. Putchar()   B. getchar()   C. scanf()   D. printf()
5. Conditional operator is
    A. <   B. ?:   C. =   D. –
6. Decision making statement is
    A. if   B. for   C. do   D. while
7.This operator makes two way decisions
    A. Relational operator   B. Assignment operator
    C. Conditional operator   D. Arithmetic operator
8.The control conditions are tested before the start of the loop execution is said to be
    A. Entry controlled loop   B. Exit controlled loop
    C. Goto Statement   D.Break
9.A String is an
    A. Loop   B. Array of characters   C. Loop   D. Pointer
10.An array is a collection of
    A. Similar data items   B. Different data items   C. Index   D. Function

PART-B (Answer any 2 question)

2 X 5= 10

1. Discuss in detail about the Scanf() and Printf() function
2. Explain about Control strings
3. Describe Decision making and branching statements.

PART-C (Answer any 3 questions)

3 X 10= 30

1. Explain in detail about the basic structure of a C Program
2. Discuss in detail about C Data types
3. Define Array. Explain the different types of arrays with example
4. Explain Control statements in detail with example
5. Write a C program to calculate the Arithmetic mean and Standard deviation

SUBJECT INCHARGE

HEAD OF THE DEPARTMENT

GOVERNMENT ARTS AND SCIENCE COLLEGE FOR WOMEN, BARGUR
DEPARTMENT OF COMPUTER SCIENCE
I CYCLIC TEST – FEBRUARY 2020

CLASS   : I M.Sc   MAX. HOURS: 2
SUBJECT: .NET PROGRAMMING   MAX. MARKS: 50

PART A (1*10 –10)
ANSWER ALL QUESTIONS

1. ------------------ is the components of the .NET framework provide an extensible set of classes that can be used by any .NET compliant programming language?
   a) .NET class libraries   c) Common Language Runtime
   b) Common Type System   d) Component Object Model

2. Which of the following jobs are done by Common Language Runtime?
   1. It provides core services such as memory management, thread management, and remoting.
   2. It enforces strict type safety.
   3. It provides Code Access Security.
   4. It provides Garbage Collection Services.
   a) 1   b) 2   c) 1,2,3   d) All

3. Which of the following are parts of the .NET Framework?
   1. The Common Language Runtime (CLR)
   2. The Framework Class Libraries (FCL)
   3. Microsoft Published Web Services
   4. Mobile Applications
   a) 1   b) 2   c) 1,2,3   d) All

4. Which property determines whether the control is displayed to the user?
   a) Hide   b) Show   c) Visible   d) Enabled

5. Which is not a common control event?
   a) Click   b) Single Click   c) Double Click   d) MouseMove

6. _____ that displays as much information as possible, whenever possible.
   a) IntelliSense Submenu b) Word wrap   c) Parameter Info d) Quick Info

7. _____ displays a hierarchical list of all the components, organized by project
   a) IntelliSense Submenu b) Solution Explorer   c) Team Explorer d) Tool Box

8. A numeric value that determines the position of the control in the Tab order
   a) Tab stop   b) Tab Index   c) val()   d) none

9. The code which runs under the CLR is called as _____
   a) Managed Code b) Native Code c) view code d) None

10. _____ is uniform query syntax in C# and VB.NET to retrieve data from different sources and formats
    a) LINQ (Language Integrated Query) b) SQL c) PLSQL d) None

PART B (2*5 –10)
ANSWER ANY TWO QUESTIONS

11. Write the syntax of IF statement in VB.NET and give an example
12. Write the syntax of flow control statements.
13. Write down the steps of creating windows and console application and give an example

PART C (3*10 =30)
ANSWER ANY THREE QUESTIONS

14. Discuss in detail about the .Net framework architecture
15. Explain the textbox control and its properties.
16. Build a simple calculator using windows application
17. Discuss VB.NET IDE and Visual studio.NET IDE

SUBJECT INCHARGE   HEAD OF THE DEPARTMENT

GOVERNMENT ARTS AND SCIENCE COLLEGE FOR WOMEN. BARGUR

DEPARTMENT OF COMPUTER SCIENCE
I CYCLIC TEST – FEBRUARY 2021

CLASS : II B. Sc

SUBJECT: SBEC VI –PHP SCRIPTING LANGUAGE

MAX. HOURS: 2

MAX. MARKS: 50

SECTION – A(10 X 2 = 10)

I. ANSWER ALL QUESTIONS :

1. PHP stands for A. Hypertext Preprocessor B.Hypertext Processor
   C. Pre hypherprocessor D.None

2. Which of the following function is used to get length of a string?
   A - size() B - strlen() C - length D - None of the above.

3. Which of the following is used to get information sent via get method in PHP?
   A - $_GET B - $GET C - $GETREQUEST D - None of the above.

4. Which of the following function is used to read the content of a file?
   A - fopen() B - fread() C - filesize() D - file_exist()

5. PHP files have a extension of
   A. .html B. .xmlc..php d..ph

6. If you need to output something onto the screen you'll need to use
   A. echo or print_r B. $ C.>> D. All

7. Which symbol is used in front of a variable?
   A. $ B.@ C.* D.#

8. _____ is replaced by the newline character
   A.\n B.\r C.\\ D.\$

9. File its existence is confirmed using _____ function
   A.file_exist() B.file_exit() C.file_entry() D.None

10. Acronym of HTTP
    A. Hyper Transfer Text protocol B. HyperText Transfer protocol
    C. High text transfer program D.None

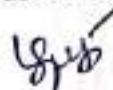## SECTION – C (2 X 5 = 10)

II. ANSWER ANY TWO QUESTIONS
11. Write short notes on sending E-mail using PHP script.
12. Explain the tags in PHP script.
13. How to display the dynamic content in PHP.
14. Write down the script to display our college details using PHP and HTML tags.

SECTION – C (3 X 10 = 30)

III. ANSWER ANY THREE QUESTIONS.
15. Write in detail about PHP script for File system.
16. Illustrate operators in PHP with suitable examples.
17. How to upload the files to website? Explain.
18. Illustrate various tags in HTML with an example.

SUBJECT INCHARGE

HEAD OF THE DEPARTMENT

GOVERNMENT ARTS AND SCIENCE COLLEGE FOR WOMEN, BARGUR

DEPARTMENT OF COMPUTER SCIENCE
I CYCLIC TEST – FEBRUARY 2021

CLASS : II M.Sc

SUBJECT: 19PCSE09- CYBER SECURITY

MAX. HOURS: 2

MAX. MARKS: 50

SECTION – A(10 X 1 = 10)

1. _____ addresses the security objectives that are specific to information.
   a) Confidentiality, integrity, and availability   b) Confidentiality, Integrity and Accessibility
   c) Consistency, Integrity and availability   d) None

2. The tension between demand for cyber functionality and requirements for security is addressed through
   a) Cyber security   b). Cyber security Policy   c) Cyber security strategy   d) None

3. NIST   a) National Institute of Standards and Technology
   b) National Industry for Standards and Technology
   c) National Institute for Strategy and Techniques   d) None

4. Acronym for CISO
   a)Chief information security officer   b)Chief important security officer
   c)Chief important service officer   d)Chief information secure officer

5. A method of inspecting each individual information packet within a stream of network traffic that they called a   a)Phising   b) firewall   c)Security   d) All

6. ARPANET abbreviates as
   a) Advanced Research Projects Agency Networks   b) Aided Research Projects Agency Networks
   c) Advanced Realtime Projects Agency Networks   d)None

7. ICANN Stands for   a) Internet corporation for Assigned names and numbers
   b) International corporation for Assigned names and numbers
   c) Internet corporation for Assigned numbers and names   d)None

8. Criminals use _____ as soldiers in cyber attacks
   a) Robots   b)Bot   c) Botnets   d) All of the above

9. EULA   a) End User License Agreement   b) Early User Licence Agreement
   c) End User License Assignment   d)None

10. Four major players in the E-Commerce environment
   a) Customer, the Retailers, the product vendor, wholesaler or Manufacturer
   b) Customer, Owners, Salesperson, Marketer
   c) Customer, Buyer, Seller, Owner   d) None

SECTION – B (2 X 5 = 10)

II.ANSWER ANY TWO QUESTIONS

11. What is cyber security policy? Explain.
12. Explain about cyber security management cycle.
13. Discuss in detail about Email and Messaging.
14. Differentiate Cyber Espionage and cyber Sabotage

SECTION – C (3 X 10 = 30)

III. ANSWER ANY THREE QUESTIONS.

15. Discuss about the Domains of cyber security policy.
16. Discuss about cyber security Evolution.
17. Describe about the Cyber Governance issues.
18. Discuss in detail about the i) Cyber Crime ii)Intellectual property theft iii)Privacy

1. _____ 2. _____

SUBJECT INCHARGE

HEAD OF THE DEPARTMENT

GOVERNMENT ARTS AND SCIENCE COLLEGE FOR WOMEN, BARGUR

DEPARTMENT OF COMPUTER SCIENCE
II CYCLIC TEST – APRIL 2021

CLASS : II M.Sc   MAX. HOURS: 2
SUBJECT: 19PCSE09- CYBER SECURITY   MAX. MARKS: 50

SECTION – A(10 X 1 = 10)

1. NIST stands for
   a)National Institute of standards & Technology b) National Industry of standards & Technology
   c) National Institute of standards & Techniques d) National Institute of studies & Techniques

2. CME abbreviates a) Common Malware Enumeration b) Control Malware Enumeration
   c) Common Malware Endeavour c) Compatibility Malware Endeavour

3. SCADA stands for
   a) Supervisory Control and Data acquirement b) Standard Control and Data acquisition
   b) Supervisory Command and Data acquisition d) Supervisory Control and Data acquisition

4. NVD abbreviates
   a) National vulnerability data b) National vulnerability database
   c) New Vulnerability database d) National virus database

5. How many types of measures do a security badness-Ometer contains
   a) 5 b) 4   c) 3   d) 2

6. NHIN stands for a) National Health information network b) National Hygiene information network
                   c) National Health intelligence network d) National Health information net

7. _____shall promulgate a declaratory policy to help set international norms and help
   set defense expectations.
   a) Military leadership   b) National Governments   c)Private sectors   d)None

8. Government shall create a ----------------reporting system whose scope is the systems and
   Networks operated by the government for risk management
   a)Security systems b)Dashboards c) both d) Either a or b

9. Who is responsible for setting enterprise security strategy?
   a) Government   b) Senior Management   c) Workers   d)All

10.ICS stands for a) Institute control systems   b)Industrial Control systems
                  c) Industrial command systems   d) None

SECTION – B (2 X 5 = 10)

II.ANSWER ANY TWO QUESTIONS
   11. Discuss about policy as a project.
   12. Discuss about the Layered defense
   13. Discuss in detail about the Professional certification.
   14. Discuss the principles of Research and development.

SECTION – C (3 X 10 = 30)

III. ANSWER ALL QUESTIONS
   15. Discuss about any two security framework Architecture
   16. Discuss in detail about the infra structure issues of i) Banking & Finance ii) Health care
   17. Explain in detail about Research and Management and its principles.

SUBJECT INCHARGE   HEAD OF THE DEPARTMENT

CLASS : II BSC(CS)-SHIFT II
SUBJECT :SBEC-II-INTERNET AND ITS APPLICATIONS

MARRKS:75
TIME:3 HRS

SECTION -A (Answer All the Questions)   15*1=15 marks

1 The Internet was originally a project of which agency.
a.ARPA   b.NSF   c.NSA   d.None of these

2. A simple protocol used for fetching e-mail from a mailbox is
a POP2 b. POP3 c.IMAP   d. None of the above

3. A Web site's front page /main page is called
a.Browser Page   b.Search Page   c.Home Page   d.Bookmark

4) What is the full form of WWW in web address ?
a.World Wide Web   b.World Wide Word   c.World Wide Wood   d.None of these

5. Full form of HTML is:
a. Hyper Text Markup Language   b.Hyper Text Manipulation Language
c.Hyper Text Managing Links   d.Hyper Text Manipulating Links

6. _____ is one of the most widely used web server platforms.
a) IIS   b) IAS   c) ISS   d) AIS

7.IIS stands for _____
a) Interconnected Information Server   b) Interconnected Information Services
c) Internet Information Server   d) Internet Information Services

8.Which one of the following is not a search engine?
a) Bing   b) Google   c) Yahoo   d) Windows

9.To join the Internet, the computer has to be connected to a ___
a) Internet architecture board   b) Internet society
c) Internet service provider   d) Different computer

10.Which of the following protocols is used in the internet?
a) HTTP   b) DHCP   c) DNS   d) DNS, HTTP and DNS

11. A local telephone network is an example of a _____ network.
a) Packet switched   b) Circuit switched   c) Bit switched   d) Line switched

12.Internet works on ___
a) packet switching   b) circuit switching   c) both packet switching and circuit switching   d) data switching

13.Most packet switches use this principle _____
a) Stop and wait   b) Store and forward   c) Store and wait   d) Stop and forward

14) A proxy server is used as the computer?
a) With external access   b) acting as a backup   c)performing file handling   d)accessing user permissions

15. A computer on internet are identified by
a) E-mail address   b)Street address   c)IP address   d)None of the above

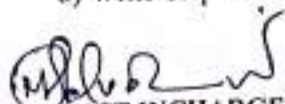## SECTION-B (Answer Any Two Questions)   2*5=10 marks

16. Explain about Networking
17. Explain about Internet firewalls
18. Write notes on TCP/IP
19. Write the difference between packet switching and circuit switching
20. Write procedure for Train Reservation

SECTION-C (Answer All the Questions)   5*10=50 marks

21. a) Explain about Internet .(or)

    b). Explain about WWW

22. a) Describe about Modem.(or)

   b) Explain about Internet Explorer

23. a) Explain about Web Server. (or)

   b) Explain about Search Engines.

24. a) Explain about Types of Network (or)

   b) Explain about Internet Protocol.

25. a)Write Steps for online passport register. (or)

   b) Write Steps for online Gas Booking

SUBJECT INCHARGE

HEAD OF THE DEPARTMENT

(6 Pages)

S.No. 2206

21UCS09

(For the candidates admitted from 2021–2022 onwards)

B.Sc. DEGREE EXAMINATION, NOVEMBER 2023.

Fifth Semester

Computer Science

LINUX AND SHELL PROGRAMMING

Time : Three hours

Maximum : 75 marks

PART A — (15 × 1 = 15 marks)

Answer ALL questions.

1. What is a program that manages computer hardware and software for the user?

   (a) Operating system   (b) Hardware

   (c) Software   (d) None of these

2. The Unix shell is both _____ and _____ language.

   (a) Interactive, responsive

   (b) High level, low level

   (c) Scripting, interpreter

   (d) Interpreter, executing

3. In which language UNIX is written?

   (a) C++   (b) C

   (c) JAVA   (d) Python

4. Expand GUI _____

   (a) Graphical User Interface

   (b) Graph User Interface

   (c) Graphical User Internet

   (d) Graph User Internet

5. Which command is used to check the contents of the directory?

   (a) $ls   (b) &ls

   (c) &ll   (d) None of these

6. _____ command is used to terminate the process.

   (a) Exit   (b) End

   (c) Kill   (d) Terminate

7. Which character is used to sort as per the numeric value?

   (a) -d   (b) -n

   (c) -p   (d) -s

8. _____ to extract specified columns/characters of a text.

   (a) Cut command   (b) Paste command

   (c) Join command   (d) Sort command

2   S.No. 2206

9. Among the following command which is used with vi editors to delete a single character?

   (a) a   (b) x

   (c) y   (d) z

10. Which Unix command is used for counting words, lines, and characters in a file?

    (a) wc   (b) man

    (c) count   (d) diff

11. _____ is an unsigned integer used by a process to identify an open file.

    (a) Chmod   (b) File read

    (c) File write   (d) File descriptor

12. Which one of the following command to search for matching patterns in a file?

    (a) Trap   (b) Grep

    (c) Sleep   (d) Kill

13. The commands source and _____ can be used to run the Shell script in the current shell instead of creating a new process.

    (a) Colon (:)   (b) Period (.)

    (c) Dollar ($)   (d) Slash (/)

3   S.No. 2206

14. _____ filename to take out write and executable permissions.

    (a) chmod-ax   (b) chmod-ex

    (c) chmod-rx   (d) chmod-wx

15. Choose the correct test operator: Check if the file is a sockect

    (a) -u file_name   (b) -x file_name

    (c) -s file_name   (d) -S file_name

PART B — (2 × 5 = 10 marks)

Answer any TWO questions out of Five.

16. Give the details about History of Unix.

17. Write short notes on Comparison of Shells.

18. Explain about CUT and PASTE command with example.

19. Summarizing the read command with options.

20. Narrate the String comparison options for the test command.

4   S.No. 2206

[P.T.O.]

PART C — (5 × 10 = 50 marks)

Answer ALL questions.

21. (a) Briefly explain the Linux Distribution.

Or

(b) Describe about the Vi editors.

22. (a) Difference between Compiler and Interpreter.

Or

(b) Explain about understanding "at" and "crontab" command with example.

23. (a) Discuss about local variable and its scope with example.

Or

(b) How to create and initialize an array? Explain with example.

24. (a) Summarize the interactive shell scripts with example.

Or

(b) Narrate the Reading from one file and writing to another file.

25. (a) Explain about Switching case in linux. Give suitable example.

Or

(b) What is function? How to define function with example?

வகுப்பு: I-B.Sc(SII)
பாடம்: மனவளக்கலை யோகா

நேரம்: 2 மணி
மதிப்பெண்:50

பகுதி-அ(அனைத்து வினாக்களுக்கு விடையளிக்க)
10*1=10

1. வாழ்க்கைக்கு தேவையான அடிப்படை தத்துவங்கள் _____.
   அ) 13   ஆ) 12   இ) 11   ஈ) 15
2. அகத்தாய்வு _____ ஆராய்தல் முதல் பயிற்சி.
   அ) ஆசை   ஆ) எண்ணம்   இ) சினம்   ஈ) கவலை
3. பிறவிப் பெருங்கடல் நீந்துதல் என்ற லட்சியத்தை நாம் அடைய வேண்டும் என்பது ஒர்
   அ) ஆசை ஆ) எண்ணம்   இ) சினம்   ஈ) கவலை
4. மன அலைச்சுழல் சாதாரணமாக மனிதனுக்கு வினாடிக்கு ___சுழற்சி வரை இருக்கும்.
   அ) 3 முதல் 8   ஆ) 14முதல் 40   இ) 8 முதல் 13 ஈ) 4 முதல் 7
5. சினம் ஒரு _____போன்றது
   அ) சங்கிலி   ஆ) தொற்று இ) நோய்   ஈ) மனயழுத்தம்
6. கவலைக்கான காரணங்கள_____வகைப்படும்
   அ) 11   ஆ) 10   இ) 12   ஈ) 7
7. வாழ்த்து என்பது ____அலை
   அ) சினம் ஆ) செயல்   இ) எண்ணம் ஈ) கோபம்
8. மனித வாழ்க்கையில் விலைமதிக்க முடியாதது _____.
   அ) சொந்தம்   ஆ) நட்பு   இ) பொருள் ஈ) பணம்
9. மனித வாழ்வுக்கு அவசியம் _____.
   அ) உடல்நலம்   ஆ) மனநலம்   இ) பணம்   ஈ) சொந்தம்
10. வாழ்க வளமுடன் என்ற எண்ணத்திற்கு அதிகம் ____
    அ) ஆசை   ஆ) வது   இ) சினம்   ஈ) செயல்

பகுதி-ஆ(ஏதேனும் இரண்டிற்கு விடையளி)   2*5=10

11. தேவைகள் மூன்றையும், காப்பு களின் மூன்றையும் விளக்குக
12. கவலையை எதிர்கொள்வது எப்படி
13. வாழ்த்தினால் ஏற்படும் நன்மைகளை விளக்குகக

பகுதி-இ(ஏதேனும் மூன்றிற்கு விடையளி)   3*10=30

14. எண்ணம் எழக் காரணங்களை எடுத்துக்காட்டுடன் விவரிக்க
15. சினத்தினால் வரும் தீமைகளை விவரிக்க
16. நட்பு நலம் பற்றி விவரிக்க
17. உலக அமைதிக்கான அவசியம், வழிமுறை இவற்றை விவரிக்க

பாட ஆசிரியர்

துறைத்தலைவர்

GOVERNMENT ARTS AND SCIENCE COLLEGE FOR WOMEN, BARGUR
DEPARTMENT OF COMPUTER SCIENCE
I CYCLIC TEST – SEPTEMBER 2022
II M.SC[CS]

Subject : BIG DATA ANALYTICS

Semester: I

Time: 2 Hours

Maximum: 50

$10 \times 1 = 10$

PART-A (Answer all questions)

1. Data in _____ bytes size is called big data
   a) Tera b) Giga   c) Peta d) Mega

2. What are the main components of big data?
   a) Map reduce b) HDFS   c) YARN   d)All of the above

3. OLAP is
   a). Online analytics Processing   b). Online Transaction Processing
   c). Online access analytics processing   d). None of the above

4. Transaction of data of the bank is a type of
   a) Unstructured data b) Structured data c)Semi d) None of the above

5. GINA a)Global Innovation network & analysis b)Geographical Innovation network & analysis
   c)Global Innovation net analysis   d)Global Innovation network area

6. CSV a). common separated value b) comma-separated-value
   c). comman-sample value d) comma-sample-value

7. Data assets gathered from multiple sources and technologies for analysis
   a) Data mart b) Data Warehouse   c) Analytics sandbox d) spreadsheets

8. R uses _____ as the separator character in the directory in the file path
   a) /   b) \   c) //   d)\\

9. Ordinal datatype is   a) Categorical   b)Numerical   c) quantitative d)All

10. A function used to examine the characteristics of a variable
    A. class()   B. read()   C. setwd()   D. length()
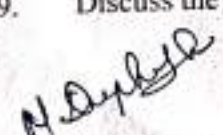
PART-B (Answer any 2 question)

$2 \times 5 = 10$

11. Explain BI Vs Data Science
12. Describe the key roles for the new big data ecosystem
13. Explain the common tools used for data preparation, model planning and model building
14. Describe about NOIR.

PART-C (Answer any 3 questions)

$3 \times 10 = 30$

15. Explain i) Data repositories ii) Drivers of Big data
16. Explain in detail about the typical analytical architecture with a neat diagram.
17. Discuss in detail about background and overview of data analytics lifecycle
18. Explain GINA : Case study of Big data
19. Discuss the basic features of R Programming

SUBJECT INCHARGE

HEAD OF THE DEPARTMENT

Subject : BIG DATA ANALYTICS
Semester: III

Time: 2 Hours
Maximum: 50
10 X 1 = 10

PART-A (Answer all questions)

1. Which of the following is required by K-means clustering?
   a) defined distance metric b) number of clusters
   c) initial guess as to cluster centroids d) all of the mentioned

2. Which techniques are all belongs to Unsupervised learning?
   a) Clustering b) Decision trees c) Naïve Bayes d) C4.5

3. Which metric is used to measure optimal value of k
   a) WSS b). d(p,q) c) a&b d). None of the above

4. The process of identifing the appropriate value of k is referred to as finding the _____ of the WSS curve
   a) manhattan b) elbow c) Euclidean d) None of the above

5. PAM a)Partitioning around medoids b)Partitioning around mean
   c)Partitioning around mean d)all

6. ID3 a). Iterative Dichotomiser 3 b) Iterative decision tree
   c). Internal Decision tree d) Internal Dichotomiser

7. Entropy and Information gain measures
   a) Purity and Impurity b) Purity c) Impurity d) Impurity & purity

8. Conversion of Continuous variables into categorical one is
   a).discretization of continuous variable b) reduction c) Preprocessing d)None

9. _____ is a specific table that allows visualization of the performance of a classifier
   a) TN b)Matrix c) Conversion matrix d)Confusion matrix

10. FPR a. False positive rate b. False pulse rate c. First positive rate d. First pulse rate

PART-B (Answer any 2 question)

2 X 5= 10

11. Differentiate Clustering and Classification
12. Describe the different use cases of Clustering
13. Explain Decision tree with example

PART-C (Answer any 3 questions)

3 X 10= 30

14. Explain i) WSS ii) Rescaling
15. Explain the steps of k-means algorithm to find k clusters.
16. Explain the general algorithm to construct a decision tree.
17. Discuss about Naïve bayes theorem in detail

M.Duplayla.
SUBJECT INCHARGE

HEAD OF THE DEPARTMENT

GOVERNMENT ARTS AND SCIENCE COLLEGE FOR WOMEN, BARGUR
DEPARTMENT OF COMPUTER SCIENCE
MODEL EXAMINATION – JUNE 2022

CLASS : I B.Sc – CS (Shift I)
SUBJECT : Computer Organization and Architecture

MAX. HOURS: 3 Hrs
MAX. MARKS: 75

Total - 36
Present - 34
Absent - 03
LA - 01

PART A — (15 * 1 = 15 marks)
Answer ALL the questions.

1. Which is the main part of Central Processing Unit(CPU)?
   - (a) Arithmetic and logic unit
   - (b) Control Unit
   - (c) Memory unit
   - (d) Input/output unit

2. Normally digital computers are based on
   - (a) AND and OR gates
   - (b) NAND and NOR gates
   - (c) NOT gate
   - (d) None of the above

3. What is the output state of an OR gate if the inputs are 0 and 1?
   - (a) 0
   - (b) 1
   - (c) not defined
   - (d) 2

4. Boolean Algebra obeys _____
   - (a) commutative law
   - (b) associative law
   - (c) distributive law
   - (d) commutative, associative, distributive law

5. A circuit that changes data into the required digital form is called a/an ____
   - a) Demultiplexer
   - b) Multiplexer
   - C) Encoder
   - d) Decoder

6. Which is the commutative property?
   - (a) A+B = B+A
   - (b) A+1 = 1+A
   - (c) B+1 = 1+B
   - (d) A+B+C=C+B+A

7. What is the octal equivalent of the binary number 10111101?
   - (a) 675
   - (b) 275
   - (c) 572
   - (d) 573

8. In which function each term known as max term
   - (a) SOP (b) POS (c) Hybrid (d) a&c

9. Don't care conditions can be used for Simplifying Boolean expressions in
   - (a) Registers
   - (b) Terms
   - (c) K-maps
   - (d) Latches

10. The basic latch consists of _____
    - a) Two inverters b) Two comparator c) Two amplifiers d) Two adders

11. Total number of inputs in a half adder is _____
    - a) 2 b) 3 c) 4 d) 1

12. How many types of flip-flops are there?
    - a) 4 b) 3 c) 2 d) 1

13. Which of the following has the capability to store the information permanently?
    - a) RAM b) ROM c) Storage cells d) Both RAM and ROM

14. A register is defined as _____
    - a) The group of latches for storing one bit of information
    - b) The group of latches for storing n-bit of information
    - c) The group of flip-flops suitable for storing one bit of information
    - d) The group of flip-flops suitable for storing binary information

15. Which of the following is programmed electrically by the user?
    - a) ROM b) EPROM c) PROM d) EEPROM

PART B — (2 * 5 = 10 marks)
Answer any TWO questions out of Five.

16. Describe about the NOR gates with neat diagram.
17. Summarize the basic law of Boolean algebra
18. Convert the binary number 1100110010 to decimal and hexadecimal
19. Discuss about the BCD subtraction with An example.
20. Differentiate the features of ROM and RAM

PART C — (5 × 10 = 50 marks)
Answer ALL the questions.

21. (a) Discuss about the digital logic and digital IC
    Or
    (b) Describe about the Universal Logic gates

22. (a) Explain the following:
    (i) Simplification of expressions
    (ii) De Morgan's theorems.
    Or
    (b) Discuss in detail about the BCD Encoder

23. (a) Convert the followings:
    (i) $(152)_{10} = (?)_{16}$
    (ii) $(1101010.01010100)_2 = (?)_{16}$
    (iii) $(152A.25)_{16} = (?)_{10}$
    (iv) $(12452.112)_8 = (?)_2$
    Or
    (b) Explain Binary addition and Binary Subtraction with example

24. (a) Discuss in detail about the Fast Adder With a neat diagram
    Or
    (b) Describe in detail about the JK Master-slave Flip-flops

25. (a) Describe briefly about the registers
    Or
    (b) Explain in detail about different types of ROM

SUBJECT INCHARGE

HEAD OF THE DEPARTMENT

Subject : 21UCS01-Problem solving through C

Time: 2 Hours

Maximum: 50

Semester: I

10 X 1 = 10

PART-A (Answer all questions)

1. Meaning of booting in the operating system.
   A) Restarting Computer   B) install the program   C) To Scan D) To turn off

2. C is the language developed by
   A) Ken Thomson B) Dennis Ritchie C) Martin Richards   D) None of the above

3. Do-While is a
   A. Exit controlled   B. Entry controlled   C. Both a & b   D. None of the above

4. A Function is used for printing a particular character
   A. Putchar()   B. getchar()   C. scanf()   D. printf()

5. RAM is A) Non_Volatile B)Volatile C)Both a & b D) None of the above

6. Decision making statement is
   A. if   B. for   C. do   D. while

7. Statement used to carry out one of the two possible actions depending on the outcome of a logical test   A) If   B)While   C) For   D) Switch

8. The control conditions are tested before the start of the loop execution is said to be
   A. Entry controlled loop   B. Exit controlled loop
   C. Goto Statement   D.Break

9. Assignment operator is   A) <   B)?   C) =   D) –

10. Scanner is an
    A. Input device   B. Output device   C. Software   D. Hardware

PART-B (Answer any 2 question)
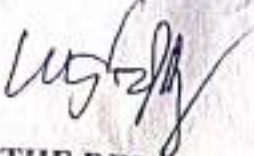
2 X 5= 10

11.   Explain about Computer hardware
12.   How will you execute a C Program? Explain
13.   Write a C program for addition of two numbers

PART-C (Answer any 3 questions)

3 X 10= 30

14.   Explain i) Operating System ii)Computer Languages
15.   Explain in detail about the basic structure of a C Program
16.   Discuss in detail about C Character set and C Tokens
17.   List and Explain the Decision-making statements.
18.   Write a C program to print the prime numbers within the range of integers given.

SUBJECT INCHARGE

HEAD OF THE DEPARTMENT

CLASS: II M.Sc(CS)   MAX. MARKS: 50
SUBJECT: BIG DATA ANALYTICS   Time: 2 hrs

PART-A (Answer all the questions)   10*1=10 marks

1. What are the main components of big data?
   a)HDFS   b)Map reduce   c)YARN   d) All of the above

2. Transaction of data of the bank is a type of _____
   a)unsupervised   b)supervised   c)unstructured data   d)structure data

3. The Hadoop list includes the HBase database the Apache Mahout _____ System and Matrix operations.
   a) deep learning   b) machine learning   c) decision learning   d) all of the above

4. Mapper class is _____ type
   a)generic   b) analyse   c) data   d)All of the above

5. What is the process of Analyzing data in real-time as it is generated?
   a)Streaming processing   b) mapping   c)projecting   d)learning

6. Which of the following is a valid variable in R?
   a)var2   b)Var2   c)VAR2   d) VaR2

7. R was created by _____
   a) Ross Ihaka   b) Robert Gentleman   c) Both a and b   d) Ross Gentleman

8. Command lines entered at the console age limited to about _____ bytes.
   a)4095   b)4085   c)0   d)1

9. R file has an extension _____
   a).R   b) .r   c) .r program   d) .R program

10. Which statement is used to stop the loop.
    a) Break   b) goto   c) end   d) quit

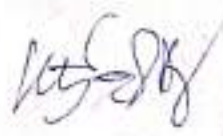## PART-B (Answer any TWO questions)   2*5=10 marks

1. Explain on Emerging Big data Eco system and new approach to Analytics.
2. Explain the roles of Analytics project.
3. Explain the attributes and data types in R programming.

PART-C (Answer any THREE questions)   3*10=30 marks

1. Explain about Data analytics life cycle and brief on i) Discovery phase ii) Model phase
2. What is the statistics methods for Evolution and explain i) Hypothesis testing ii) Wilcoxon Rank-Sum test.
3. Describe in detail on ANOVA.
4. Explain Data preparation, Model building and communicate result phase of Data Analysis Life Cycle.

SUBJECT INCHARGE   HEAD OF THE DEPARTMENT

GOVERNMENT ARTS & SCIENCE COLLEGE FOR WOMEN BARGUR

Cycle Test – II (Sep– 2023)

Class: II BA/B.Sc/ Shift I & II

English III   Max: 50 Marks

Topic: Foundation

Section A (10x1=10)

I.   Choose the correct answer:

1.   Who introduced the theory of six thinking hate?
   a) Edward de Bono   b) Aristotle   c) Robert Solow   d) Plato

2.   Identify the hat that represents facts, figures, data and information.
   a) White hat   b) Red hat   c) Blue hat   d) Green hat

3.   Warangi is an alcoholic drink made from __
   a) Grapes   b) Oranges   c) Bananas   d) Pine apples

4.   What instruments does the musician play?
   a) Flute   b) guitar   c) drum   d) trumpet

5.   Where do squirrels hide their nuts?
   a) Among plants   b) within holes   c) in grass   d) in huts

6.   'Beauty' here refers to __
   a) a beautiful woman   b) a beautiful star
   b) a beautiful flower   d) the beauty of Nature

7.   Who gifted the doll's house?
   a) Mrs.Mary   b) Mrs. Victoria   c) Mrs.Hay   d) Mrs.Nancy

8.   Who was the youngest among the Burnell children?
   a) Isabel   b) Lollie   c) Icezia   d) Lil

9.   What do the streams look like in broad daylight?
   a) Stars   b) waves   c) butterflies   d) woods

10. The Six Thinking Hats delineate __
   a) a form of thinking   c) a form of eating
   b) a form of imagination   d) a form of reflection

Section - B (2x5=10)

II.   Answer the following:

11. Write the opposite of these words by using a prefix.
   a) Correct   b) obey   c) patient   d) polite   e) happy

12. Choose the most appropriate phrasal verb:
   [drove off, put on, set off, called off, going on, took off, put off]
   a. It was warm, so I __ my jacket.
   b. What are all these people doing? What's __?
   c. Don't __ until tomorrow what you can do today.
   d. Rachel got into her car and __ at high speed.
   e. Since the demands of the drivers were met, the bus strike was __

Section – C (3x10=30)

III.   Answer any three of the following questions:

13. Write a stylistic analysis of the poem 'Leisure'
14. Write an essay on how the Six Thinking Hats method can develop a beautiful mind.
15. Write a character sketch of Kezia
16. Write a short story on The Trick.

V. Vanda
Sub Incharge.

HOD

25 copies

CLASS: II M.SC [CS]   MAX. MARKS: 75
SUBJECT: OPEN SOURCE COMPUTING   Time: 3 hrs

PART-A (Answer all the questions)15*1=15 marks

1. What is the output of the statement >>>9//5 ?
   a)1   b) error   c) 4
2. _____ is used to combine list items.
   a) concat   b) *   c) extend()
3. Set datatype is immutable in python say
   TRUE or **FALSE**
4. _____ is a compact way of creating a python data structure from one or more iterators.
   a) Generator   b) Iterator   c) Comprehension
5. Specify arguments by the name of their corresponding parameters.
   a) Positional arguments b) Keyword arguments
   c) Parameter arguments.
6. A _____ is a function that takes one function as input and returns another
   a) Generator   b) Decorator   c) namespace
7. We can organize modules into file hierarchies called _
   a) utilities b) objects   c) packages
8. What is the output of the following statement
   >>> '%x'%42
   a) 42 b) '42' c) '2a'
9. Which file format is used as   worksheet in python?
   a) .csv   b) .xls   c) .xlass
10. The command used to one or more Sql command
    a) execute   b) fetch()   c) fetchall()
11.
a)   b)   c)
12. _____ is a fast-in-memory key value cache server.
    a) memcached   b) memcache   c) cacha-in
13. _____ merge server side data into pages of HTML.
    a) template   b) routes   c) session
14. Bottle and Flask are _____ servers.
    a) webservers b) web browsers   c) debugging
15. The _____ function checks whether the file is in symbolic link
    a) link()   b) simlink() c) islink()

PART-B (Answer any two questions)   2*5=10 marks

16. Write short note on List in Python.
17. Explain in detail Duck typing in Python.
18. Explain Structured text Files in Python.
19. Explain in detail about Calenders and Clocks in Python.
20. Write short note on Green threads and gevent.

PART-C (Answer all questions)   5*5=50 marks

21 a. Explain in detail String data types in Python. (or)

b. Explain with example Dictionary datatype and its functions in Python.(or)

22 a. Explain about the Control Structures available in Python. (or)

b. Write short note on functions and inheritance in python with example.

23 a. Explain in detail Sturctured Binary files in Python.(or)

b. Explain in detail Relational databases used in Python.

24 a Explain in detail files & directories in Python s.(or)

b. Explain in detail Relational databases

25 a. Web services and API's used in Python .(or)

b. Write short notes a) Threads b) TCP/IP c) Sockets

SUBJECT INCHARGE   HEAD OF THE DEPARTMENT